IN THE CLAIMS

1. (Currently Amended) A method for manufacturing photoaddressing data storage media comprising:

providing a film comprising an organic polymer that comprises a <u>resorcinol arylate</u> copolyestercarbonate or a blend of resorcinol arylate polyester and a polycarbonate;

irradiating at least a portion of the film with a UV beam having a wavelength of about 290 to about 400 nanometers so as to impart an energy of about 1 to about 20 milliwatt/square centimeter to the irradiated portion of the film, wherein the irradiating produces a difference in refractive index of about 0.0001 to about 0.1 between an irradiated portion and an unirradiated portion of the film.

wherein the irradiating produces a pattern in the film.

2. (Original) The method of Claim 1, wherein the resorcinol arylate polyester has the structure of formula (XII)

$$\begin{array}{c|c} O & O \\ C & C \\ \hline \end{array}$$

wherein R is at least one of C_{1-12} alkyl or halogen, n is 0 to 3, and m is at least about 8.

3. (Currently Amended) The method of Claim 2, wherein m is about 10 and to about 300.

4. (Original) The method of Claim 1, wherein the resorcinol arylate polyester has the structure of formula (XIII)

$$\begin{array}{c|c} O & O & O \\ C & C & C & O \\ \hline \end{array}$$

$$\begin{array}{c|c} O & O & O \\ \hline C & C & O \\ \hline \end{array}$$

$$\begin{array}{c|c} R_n & O & O \\ \hline \end{array}$$

$$(XIIII)$$

wherein R is at least one of C_{1-12} alkyl or halogen, n is 0 to 3, and m is at least about 8.

- 5. (Currently Amended) The method of Claim 4, wherein m is about 10 and to about 300.
- 6. (Currently Amended) The method of Claim 1, wherein the organic polymer has the structure of formula (XIV)

wherein each R^1 is independently halogen or C_{1-12} alkyl, m is at least 1, p is about 0 to about 3, each R^2 is independently a divalent organic radical, and n is at least about 4.

- 7. (Original) The method of Claim 6, wherein m is about 2 to about 200 and n is about 30 to about 150.
 - 8. (Cancelled)
- 9. (Original) The method of Claim 1, wherein the organic polymer is irradiated for a time period of about 30 seconds to about 5 minutes.

1

- 10. (Original) The method of Claim 1, wherein the organic polymer is in the form of a film having a thickness of about 1 to about 1,000 micrometers.
 - 11. (Original) The method of Claim 10, wherein the film comprises a single layer.
 - 12. (Original) The method of Claim 10, wherein the film is multilayered.
- 13. (Original) The method of Claim 1, wherein the irradiation promotes a Fries molecular rearrangement in the organic polymer.

14.-15. (Cancelled)

- 16. (Original) The method of Claim 1, wherein the organic polymer has a shrinkage of less than or equal to about 5 volume percent when compared with the volume of the organic polymer prior to the irradiation.
- 17. (Original) The method of Claim 1, wherein the organic polymer undergoes a shrinkage of at least 10 volume percent less than the shrinkage of a hydroquinone polyester when both are subjected to the same amount of irradiation per unit volume.
- 18. (Original) The method of Claim 1, wherein the organic polymer undergoes a yellowing of at least 50 percent less than the yellowing of a hydroquinone polyester when both are subjected to the same amount of irradiation per unit volume.
 - 19. (Withdrawn) A holographic pattern manufactured by the method of Claim 1.
 - 20. (Withdrawn) An article manufactured by the method of Claim 1.
 - 21. (Withdrawn) A data storage device manufactured by the method of Claim 1.
- 22. (Withdrawn) A photonic communication device manufactured by the method of Claim 1.
 - 23. (Withdrawn) A waveguide manufactured by the method of Claim 1.